Occupational and Environmental Medicine

VOLUME 52

Editor: Anne Cockcroft (United Kingdom)
Technical Editor: Judith Haynes
Editorial Assistant: Rachel Harvey
Editorial Board:

T C Aw (United Kingdom)
F J H Van Dijk (Holland)
J S Evans (United States)
R M Harrison (United Kingdom)
J Jeyaratnam (Singapore)
F Kauffmann (France)
R L Maynard (United Kingdom)
R McNamee (United Kingdom)
J Myers (South Africa)
B Nemery (Belgium)
T Okubo (Japan)
L Rosenstock (United States)
M Sim (Australia)
M Singal (United States)
D C Snashall (United Kingdom)
O Svane (Denmark)
G Thériault (Canada)
K M Venables (United Kingdom)
Editor, *British Medical Journal*

BMJ Publishing Group

VOLUME 52 · CONTENTS

No 1 JANUARY 1995 Page

Editorial

1 A year of *Occupational and Environmental Medicine* *Anne Cockcroft*

Review

2 Cumulative exposure to inorganic lead and neurobehavioural test performance in adults: an epidemiological review *John M Balbus-Kornfeld, Walter Stewart, Karen I Bolla, Brian S Schwartz*

Papers

13 Provocative chelation with DMSA and EDTA: evidence for differential access to lead storage sites *Byung-Kook Lee, Brian S Schwartz, Walter Stewart, Kyu-Dong Ahn*

20 Radiological changes in asbestos cement workers *K Jakobsson, U Strömberg, M Albin, H Welinder, L Hagmar*

28 Cancers related to exposure to arsenic at a copper smelter *Philip E Enterline, Richard Day, Gary M Marsh*

33 Respiratory health of young shipyard welders and other tradesmen studied cross sectionally and longitudinally *D J Chinn, J E Cotes, F M El Gamal, J F Wollaston*

43 Occupational exposure to hydrazine and subsequent risk of cancer *Joan Morris, James W Densem, Nicholas J Wald, Richard Doll*

46 Work related musculoskeletal disorders and ergonomic stressors in the South African workforce *G H Schierhout, J E Meyers, R S Bridger*

51 Back pain and parenthood *Murray M Finkelstein*

54 New method for an occupational dust challenge test *Fung J Lin, Henry Chen, Moira Chan-Yeung*

57 Repeatability and validity of a field kit for estimation of cholinesterase in whole blood *L London, M L Thompson, S Sacks, B Fuller, O M Bachmann, J E Myers*

65 Effect of variation of exposure to airborne chlorobenzene on internal exposure and concentrations of urinary metabolite *Shinji Kumagai, Ichiro Matsunaga*

Correspondence

71 Differences in the effects of two hexachlorophenols on superoxide generation by polymorphonuclear leucocytes stimulated by N-formyl-methionyl-leucyl-phenylalanine and phorbol myristate acetate *Paul L Roney*

Coal mining, emphysema and compensation revisited *W K C Morgan*

Notices

No 2 FEBRUARY 1995

Review

73 Cancer and occupational exposure to inorganic lead compounds: a meta-analysis of published data *Hua Fu, Paolo Boffetta*

Papers

82 Bronchial dysplasia induced by radiation in miners exposed to ^{222}Rn progeny *M A Michaylov, D S Pressyanov, K B Kalinov*

86 Induction of *P*-450 in workers exposed to dioxin *William Halperin, Werner Kalow, Marie Haring Sweeney, Bing K Tang, Marilyn Fingerhut, Brent Timpkins, Kathleen Wille*

92 Differential release of superoxide anions by macrophages treated with long and short fibre amosite asbestos is a consequence of differential affinity for opsonin *I M Hill, P H Beswick, K Donaldson*

97 Study of the respiratory health of employees in seven European plants that manufacture ceramic fibres *W N Trethowan, P S Burge, C E Rossiter, J M Harrington, I A Calvert*

105 Are the respiratory health effects found in manufacturers of ceramic fibres due to the dust rather than the exposure to fibres? *P S Burge, I A Calvert, W N Trethowan, J M Harrington*

110 Prognosis of vibration induced white finger: a follow up study *Rolf Petersen, Marc Andersen, Sigurd Mikkelsen, Steen Levin Nielsen*

116 Neuropathy in female dental personnel exposed to high frequency vibrations *Ingrid Åkesson, Göran Lundborg, Vibeke Horstmann, Staffan Skerfving*

124 People with high mercury uptake from their own dental amalgam fillings *Lars Barregård, Gerd Sällsten, Bengt Järvholm*

129 Allergy to laboratory animals: a follow up study of its incidence and of the influence of atopy and pre-existing sensitisation on its development *P A Botham, C T Lamb, E L Teasdale, S M Bonner, J A Tomenson*

134 Work characteristics and lifestyle as predictors in the development of chronic non-specific lung disease among elderly municipal employees *L Tammilehto, K Tuomi*

138 Cost and determinants of morbidity from work related disabling injuries in Taiwan *Yi-Hung Liu, Mau-Roung Lin, Jung-Der Wang*

Correspondence

143 Prevalance odds ratio *v* prevalence ratio—some further comments *Ulf Strömberg*

Notices

Book review

No 3 MARCH 1995

Papers

145 Does occupational exposure to dust prevent colorectal cancer? *Murray M Finkelstein*

150 Mortality from lung cancer and other diseases related to smoking among fishermen in north east Italy *Guiseppe Mastrangelo, Emanuele Malusa, Corrado Veronese, Anna Zucchero, Vita Marzia, Angelo Boscolo Bariga*

154 Cancer incidence in Swedish sterilant workers exposed to ethylene oxide *Lars Hagmar, Zoli Mikoczy, Hans Welinder*

157 Mortality of butchers and cooks identified from the 1961 census of England and Wales *David Coggon, Graham Wield*

160 Manual handling activities and risk of low back pain in nurses *Julia Smedley, Peter Egger, Cyrus Cooper, David Coggon*

164 Sex ratios of births, mortality, and air pollution: can measuring the sex ratios of births help to identify health hazards from air pollution in industrial environments? *F L R Williams, S A Ogston, O L Lloyd*

170 Influence of indoor air quality and personal factors on the sick building syndrome (SBS) in Swedish geriatic hospitals *Klas Nordström, Dan Norbäck, Roland Akselsson*

177 Association between NAG-B and cadmium in urine with no evidence of a threshold *Alfred Bernard, Nathalie Thielemans, Harry Roels, Robert Lauwerys*

181 Mortality of inhabitants in an area polluted by cadmium: 15 year follow up *M Nishijo, H Nakagawa, Y Morikawa, M Tabata, M Senma, K Miura, H Takahara, S Kawano, M Nishi, K Mizukoshi, T Kido, K Nogawa*

185 Maintenance of stellite and tungsten carbide saw tips: respiratory health and exposure-response evaluations *Susan M Kennedy, Moira Chan-Yeung, Steve Marion, John Lea, Kay Teschke*

192 Effects within the week on forced vital capacity are correlated with long term changes in pulmonary function: reanalysis of studies on car painters exposed to isocyanate *Monica Dahlqvist, Göran Tornling, Nils Plato, Ulf Ulfvarson*

196 Significance of dermal and respiratory uptake in creosote workers: exposure to polycyclic aromatic hydrocarbons and urinary excretion of 1-hydroxypyrene *Eivor Elovaara, Pirjo Heikkilä, Lauri Pyy, Pertti Mutanen, Vesa Riihimäki*

204 Respiratory health of workers exposed to metal dusts and foundry fumes in a copper refinery *Gaston Ostiguy, Claude Vaillancourt, Raymond Bégin*

Short report

211 Bilateral median and ulnar neuropathy at the wrist in a parquet floorer *M dell'Omo, G Muzi, T A Cantisani, S Ercolani, M P Accattoli, G Abbritti*

Correspondence

214 The effect of occupational exposure to mercury vapour on the fertility of female dental assistants *Philip J Colquitt*

Potential public health problems of asbestos in Jamaica *Howard O Reid, Ishenkumba A Kahwa*

Notices

Book reviews

No 4 APRIL 1995

Papers

217 Cancer incidence and mortality near the Baglan Bay petrochemical works, South Wales *Susana Sans, Paul Elliott, Immo Kleinschmidt, Gavin Shaddick, Sam Pattenden, Peter Walls, Christopher Grundy, Helen Dolk*

225 Incidence of leukaemia and lymphoma in young people in the vicinity of the petrochemical plant at Baglan Bay, South Wales, 1974 to 1991 *R A Lyons, S P Monaghan, M Heaven, B N C Littlepage, T J Vincent, G J Draper*

229 Lead and cadmium in human placentas and maternal and neonatal blood (in a heavily polluted area) measured by graphite furnace atomic absorption spectrometry *Irena Baranowska*

233 Study of morbidity of personnel with potential exposure to vinclozolin *A Zober, G Hoffmann, M G Ott, W Will, C Germann, B van Ravenzwaay*

242 Mortality and cancer morbidity in workers from an aluminium smelter with prebaked carbon anodes—part I: exposure assessment *Alf Rønneberg*

250 Mortality and cancer morbidity in workers from an aluminium smelter with prebaked carbon anodes—part II: cancer morbidity *Alf Rønneberg, Aage Andersen*

255 Mortality and cancer morbidity in workers from an aluminium smelter with prebaked carbon anodes—part III: mortality from circulatory and respiratory diseases *Alf Rønneberg*

262 Chest radiography and high resolution computed tomography in the evaluation of workers exposed to silica dust: relation with functional findings *D Talini, P L Paggiaro, F Falaschi, L Battolla, M Carrara, M Petrozzino, E Begliomini, C Bartolozzi, C Giuntini*

268 Byssinosis in Guangzhou, China *C Q Jiang, T H Lam, C Kong, C A Cui, H K Huang, D C Chen, J M He, P Z Xian, Y H Chen*

273 Evaluation of the respiratory health of dock workers who load grain cargoes in British Columbia *Helen D Dimich-Ward, Susan M Kennedy, Michelle A Dittrick, Anne DyBuncio, Moira Chan-Yeung*

279 Pre-employment screening among trainee bakers *R De Zotti, S Molinari, F Larese, M Bovenzi*

Correspondence

284 Sex ratio of offspring of men exposed to sodium borates *W H James*

Assessment of risk of lung cancer among mild steel and stainless steel welders *Jean Jacques Moulin*

Urinary N-acetyl-β-D-glucosaminidase (NAG) and exposure to inorganic lead *K S Chia*

Notices

Reviewers of volume 51

No 5 MAY 1995

Reviews

289 Cause of occupational disease *D C F Muir*

294 Developments in reproductive risk management *Anne Stijkel, Frank J H van Dijk*

Papers

304 Implementation of the precautionary principle in standards for the workplace *Anne Stijkel, Lucas Reijnders*

313 Physical work load and gestational age at delivery *A P Koemeester, J P J Broerson, P E Treffers*

316 Tumour necrosis factor-*a* (TNF-*a*) in patients who have asbestosis and develop cancer *Riitta Partanen, Heikki Koskinen, Kari Hemminki*

320 Exposure to styrene and chronic health effects: mortality and incidence of solid cancers in the Danish reinforced plastics industry *Henrik A Kolstad, Knud Juel, Jørn Olsen, Elsebeth Lynge*

328 Longitudinal study of the health of cotton workers *D Li, Y N Zhong, R Rylander, Q Y Ma, X Y Zhou*

332 Dose-response relation between exposure to two types of hand-arm vibration and sensorineural perception of vibration *Hannu Virokannus*

337 Ocular effects of exposure to triethylamine in the sand core cold box of a foundry *Mary Jo Reilly, Kenneth D Rosenman, John H Abrams, Zhiwei Zhu, Chih-yu Tseng, Vicki Hertzber, Carol Rice*

344 Physiologically based pharmacokinetic model for acetone *Shinji Kumagai, Ichiro Matsunaga*

353 Upper airway response in workers exposed to fuel oil ash: nasal lavage analysis *Russ Hauser, Salma Elreedy, Jane A Hoppin, David C Christiani*

359 Notices

359 Book reviews

No 6 JUNE 1995

Editorial

361 Obituary of Ronald Epey Lane 1897–1995

Papers

362 Pleural malignant mesothelioma and non-occupational exposure to asbestos in Casale Monferrato, Italy *Corrado Magnani, Benedetto Terracini, Cristiana Ivaldi, Mario Botta, Angelo Mancini, Alberto Andrion*

368 Decline in annual lung function in workers exposed to asbestos with and without pre-existing fibrotic changes on chest radiography *Toshio Nakadate*

374 Chronic lymphocytic leukaemias and non-Hodgkin's lymphomas by histological type in farming-animal breeding workers: a population case-control study based on job titles *Dino Amadori, Oriana Nanni, Fabio Falcini, Ariele Saragoni, Vittorio Tison, Antonina Callea, Emanuela Scarpi, Miranda Ricci, Nada Riva, Eva Buiatti*

380 Risk of acute myeloid leukaemia and multiple myeloma in workers exposed to benzene *Otto Wong*

385 Dioxin concentrations in the blood of workers at municipal waste incinerators *Arnold Schecter, Olaf Päpke, Michael Ball, Anton Lis, Paul Brandt-Rauf*

388 Asthmatic symptoms and volatile organic compounds, formaldehyde, and carbon dioxide in dwellings *D Norbäck, E Björnsson, C Janson, J Widström, G Boman*

396 Effect of different exposure compounds on urinary kinetics of aluminium and fluoride in industrially exposed workers *F Pierre, F Baruthio, F Diebold, P Biette*

404 Polyneuropathy induced by carbon disulphide in viscose rayon workers *Chun-Che Chu, Chin Chang Huang, Rou-Shayn Chen, Tung-Sheng Shih*

408 Neurobehavioural evaluation of Venezuelan workers exposed to inorganic lead *Neil A Maizlish, Gustavo Parra, Oscar Feo*

415 Combined electroneurographic and electromyographic studies in lead workers *Jiann-Horng Yeh, Yang-Chyuan Chang, Jung-Der Wang*

420 Determination of low level exposure to volatile aromatic hydrocarbons and genotoxic effects in workers at a styrene plant *O Holz, G Scherer, S Brodtmeier, F Koops, K Warncke, T Krause, A Austen, J Angerer, A R Tricker, F Adlkofer, H W Rüdiger*

Correspondence

429 Offspring sex ratio as an indicator of reproductive hazards associated with pesticides *W H James*

430 Notice

430 Book reviews

No 7 JULY 1995

Review

433 Health effects of refractory ceramic fibres: scientific issues and policy considerations *L R Glass, R C Brown, J A Hoskins*

Papers

441 Epidemiological evaluation of release of monocyte TNF-*a* as an exposure and effect marker in pneumonoconiosis: a five year follow up study of coal workers *Roel P F Schins, Paul J A Borm*

451 Electroencephalographic study of divers with histories of neurological decompression illness *A W Murrison, E Glasspool, R J Pethybridge, T J R Francis, E M Sedgwick*

454 National survey on the use of chemicals in the working environment: estimated exposure events *Nanna P Brandorff, Mari-Ann Flyvholm, Inge D Beck, Torsten Skov, Elsa Bach*

464 Lorry drivers' work stress evaluated by catecholamines excreted in urine *Allard J van der Beek, Theo F Meijman, Monique H W Frings-Dresen, Judith I Kuiper, Sijmen Kuiper*

470 Survey of the respiratory health of the workers of a talc producing factory *Pascal Wild, Michèle Réfrégier, Guy Auburtin, Bernard Carton, Jean-Jacques Moulin*

478 Effect of dietary intake of trimethylamine on human metabolism of the industrial catalyst dimethylethylamine *Thomas Lundh, Bengt Åkesson, Staffan Skerfving*

484 Evaluation of lead exposure in workers at a lead-acid battery factory in Korea: with focus on activity of erythrocyte pyrimidine 5'-nucleotidase (P5N) *Yangho Kim, Koichi Harada, Shoko Ohmori, Byung-Kook Lee, Hajime Miura, Atsushi Ueda*

489 Empirical evaluation of the influence of control selection schemes on relative risk estimation: the Welsh nickel workers study *Alfredo Morabia, Tom Ten Have, J Richard Landis*

Correspondence

494 Use of the prevalence ratio *v* the prevalence odds ratio in view of confounding in cross sectional studies *Olav Axelson, Mats Fredrikson, Kerstin Ekberg*

494 Notices

495 Book reviews

No 8 AUGUST 1995

Editorial

497 For debate *Anne Cockcroft*

497 Occupational medicine: the way ahead *A Seaton, R Agius*

Papers

500 Risk of thyroid nodules in subjects occupationally exposed to radiation: a cross sectional study *Alessandro Antonelli, Giovanni Silvano, Fabrizio Bianchi, Carmelo Gambuzza, Luigi Tana, Giulo Salvioni, Vittoria Baldi, Lucia Gasperini, Lidio Baschieri*

505 Need for vaccination of sewer workers against leptospirosis and hepatitis A *Gaston De Serres, Benoit Levesque, Robert Higgins, Michel Major, Denis Laliberté, Nicole Boulianne, Bernard Duval*

508 Hepatic function in workers occupationally exposed to carbon tetrachloride *John A Tomenson, Charles E Baron, John J O'Sullivan, John C Edwards, Michael D Stonard, Robin J Walker, Deborah M Fearnley*

515 Factors affecting recognition of cancer risks of nuclear workers *George W Kneale, Alice M Stewart*

524 Symptoms of the musculosleletal system and exposure to magnetic fields in an aluminium plant *Bente E Moen, Per Arne Drabløs, Svein Pedersen, Malvin Sjøen, Georg Thommesen*

528 Evaluation of biomarkers for occupational exposure to benzene *C N Ong, P W Kok, B L Lee, C Y Shi, H Y Ong, K S Chia, C S Lee, X W Luo*

534 Impaired colour discrimination among workers exposed to styrene: relevance of a urinary metabolite *Teruko Eguchi, Reiko Kishi, Izumi Harabuchi, Junko Yuasa, Yoshihiko Arata, Yohko Katakura, Hirotsugu Miyake*

539 In vivo models of occupational asthma due to low molecular weight chemicals *J P Hayes, A J Newman Taylor*

544 Predictors of spirometric test failure: a comparison of the 1983 and 1993 acceptability criteria from the European Community for Coal and Steel *S Humerfelt, G E Eide, G Kvåle, A Gulsvik*

Short report

554 Contrasting geographical distribution of mortality from pneumoconiosis and chronic bronchitis and emphysema in British coal miners *David Coggon, Hazel Inskip, Paul Winter, Brian Pannett*

Correspondence

556 Measurement of ras p21 in the urine of people occupationally exposed to chromium compounds *A E Scobbie, T C Aw*

Offspring sex ratios as an index of pollution hazard in residential environments *W H James*

Non-differential misclassification and bias towards the null: a clarification *Sholom Wacholder, Patricia Hartge, Jay H Lubin, Mustafa Dosemeci*

558 Notices

559 Book reviews

No 9 SEPTEMBER 1995

Editorial

561 Methodology series *Anne Cockcroft*

Methodology

562 Assessment of exposure to environmental pollutants *D Coggon*

Papers

565 How have Zambian businesses reacted to the HIV epidemic? *Rachel Baggaley, Peter Godfrey-Faussett, Roland Msiska, Diane Chilangwa, Eusabio Chitu, John Porter, Michael Kelly*

570 Occupational hypersensitivity pneumonitis in Japan: data on a nationwide epidemiological study *Kazuko Yoshida, Moritaka Suga, Yuriko Nishiura, Kazuko Arima, Ryozo Yoneda, Masashi Tamura, Masayuki Ando*

575 Oilseed rape and bronchial reactivity *Anne Soutar, Clive Harker, Anthony Seaton, Geoff Packe*

581 Work related distal airway obstruction in an agricultural population *A Vergnenegre, X D'arco, B Melloni, M T Antonini, C Courat, M Dupont-Cuisinier, F Bonnaud*

587 Bladder cancer among French farmers: does exposure to pesticides in vineyards play a part? *Jean-François Viel, Bruno Challier*

593 Association of exposure to polycyclic aromatic hydrocarbons (estimated from job category) with concentration of 1-hydroxypyrene glucuronide in urine from workers at a steel plant *Daehee Kang, Nathaniel Rothman, Soo-Hun Cho, Hyun Sul Lim, Ho-Jang Kwon, Sun-Min Kim, Brian Schwartz, Paul T Strickland*

600 Exposure to polycyclic aromatic hydrocarbons in coal liquefaction workers: impact of a workwear policy on excretion of urinary 1-hydroxypyrene *R Quinlan, G Kowalczyk, K Gardiner, I Calvert*

606 Risk of gastric cancer in pneumoconiotic coal miners and the effect of respiratory impairment *G M H Swaen, J M M Meijers, J J M Slangen*

611 Biological monitoring of exposure to benezene: a comparison between S-phenylmercapturic acid, *trans, trans*-muconic acid, and phenol *P J Boogaard, N J van Sittert*

Correspondence

621 Fibrogenic effect of wollastonite compared with asbestos dust and dusts containing quartz *Ernest E McConnell*

Methods in cohort studies *R M Park*

Offspring sex ratios as an index of pollution hazard in residential environments *F L R Williams, O L Lloyd, S A Ogston*

622 Notices

623 Book reviews

No 10 OCTOBER 1995

Methodology

625 Exposure assessment in industry specific retrospective occupational epidemiology studies *N S Seixas, H Checkoway*

Papers

634 Occupational exposures estimated by means of job exposure matrices in relation to lung function in the PAARC survey *N Le Moual, E Orlowski, M B Schenker, M Avignon, P Brochard, F Kauffmann*

644 The risk of acquiring Q fever on farms: a seroepidemiological study *D Rh Thomas, L Treweek, R L Salmon, S M Kench, T J Coleman, D Meadows, P Morgan-Capner, E O Caul*

648 Neurotoxicity among pesticide applicators exposed to organophosphates *Lynette Stokes, Alice Stark, Elizabeth Marshall, Amarjit Narang*

654 Lung function and chronic respiratory symptoms of pig farmers: focus on exposure to endotoxins and ammonia and use of disinfectants *Liesbeth Preller, Dick Heederik, Jan S M Boleij, Peter F J Vogelzang, Martin J M Tielen*

661 Platinum salt sensitivity in refinery workers: incidence and effects of smoking and exposure *A E Calverley, D Rees, R J Dowdeswell, P J Linnett, D Kielkowski*

667 Mortality and cancer incidence among secondary lead smelter workers *Lars Gerhardsson, Lars Hagmar, Lars Rylander, Staffan Skerfving*

673 Haematopoietic cancer mortality among vehicle mechanics *Katherine L Hunting, Helen Longbottom, Shyam S Kalavar, Frank Stern, Eugene Schwartz, Laura S Welch*

679 Hepatic ultrasonic changes in workers exposed to perchloroethylene *Carl A Brodkin, William Daniell, Harvey Checkoway, Diana Echeverria, Janet Johnson, Keith Wang, Roya Sohaey, David Green, Carrie Redlich, David Gretch, Linda Rosenstock*

686 Reports of work related musculoskeletal injury among home care service workers compared with nursery school workers and the general population of employed women in Sweden *Yuichiro Ono, Monica Lagerström, Mats Hagberg, Arvid Lindén, Birgitta Malker*

694 Thetford plastics fire, October 1991: the role of a preventive medical team in chemical incidents *Peter J Baxter, Bryan Jefferson Heap, Michael G M Rowland, Virginia S G Murray*

Correspondence

699 Does occupational exposure to dust prevent colorectal cancer? *Robert Kusiak*

Back pain and male parenthood *Michel Rossignol*

Preliminary experimental findings using intraperitoneal assays to determine carcinogenic potential of man made mineral fibres: relevance to recent proposals for classification testing *C Collier*

A study of chromium induced allergic contact dermatitis with 54 volunteers: implications for environmental risk assessment *Alan H Stern, Robert E Hazen*

704 Book review

704 Notices

No 11 NOVEMBER 1995

Methodology

705 Needs of occupational exposure sampling strategies for compliance and epidemiology *K Gardiner*

Papers

709 Ventilation rate in office buildings and sick building syndrome *Jouni J K Jaakkola, Pauli Miettinen*

715 Seasonal changes in ambulatory blood pressure in employees under different indoor temperatures *Estela Kristal-Boneh, Gil Harari, Manfred S Green, Joseph Ribak*

722 Dose-response relation for vascular disorders induced by vibration in the fingers of forestry workers *M Bovenzi, A Franzinelli, R Mancini, M G Cannavà, M Maiorano, F Ceccarelli*

731 Acute effects of vibration from a chipping hammer and a grinder on the hand-arm system *Steve Kihlberg, Monica Attebrant, Gösta Gemne, Anders Kjellberg*

738 Cancer in printing workers in Denmark *Elsebeth Lynge, Bo Andreassen Rix, Ebbe Villadsen, Ib Andersen, Mogens Hink, Erik Olsen, Ulla Lucht Møller, Erik Silfverberg*

745 Airways responsiveness and job selection: a study in coal miners and non-mining controls *E L Petsonk, E M Daniloff, D M Mannino, M L Wang, S R Short, G R Wagner*

750 Evaluation of biomarkers in plasma, blood, and urine samples from coke oven workers: significance of exposure to polycyclic aromatic hydrocarbons *Steinar Øvrebø, Aage Haugen, Peter B Farmer, Denise Anderson*

757 Monitoring of exposure to methylpentanes by diffusive sampling and urine analysis for alcoholic metabolites *Toshio Kawai, Kazunori Mizunuma, Tomojiro Yasugi, Shum'ichi Horiguchi, Hiroshi Iguchi, Antonio Mutti, Sergio Ghittori, Masayuki Ikeda*

764 Substantial decrease of blood lead in Swedish children, 1978–94, associated with petrol lead *U Strömberg, A Schütz, S Skerfving*

Short reports

770 Enzymuria in a population living near a cadmium battery plant *Lars Järup, Margareta Dea Carlsson, Carl Gustaf Elinder, Lennart Hellström, Bodil Persson, Andrejs Schütz*

773 Diabetes mellitus and arsenic exposure: a second look at case-control data from a Swedish copper smelter *Mahfuzar Rahman, Olav Axelson*

775 Differences in occupational mortality from pleural cancer, peritoneal cancer, and asbestosis *David Coggon, Hazel Inskip, Paul Winter, Brain Pannett*

778 Further information on aluminium inhalation in silicosis *Raymond Bégin, Serge Massé, André Dufresne*

Correspondence

781 Occupational medicine: the way ahead—a reply *O Tudor*

781 Prevalence odds ratio *v* prevalence ratio—a response *J Lee, K S Chia*

782 Physical workload and gestational age at delivery *C R W Gill*

782 Management of indoor air quality problems: primum non nocere *N Magnavita*

782 Notices

783 Book reviews

No 12 DECEMBER 1995

Methodology

785 Investigation of disease risks in small areas *Paul Elliott*

Papers

790 Individual exposure to particulate air pollution and its relevance to thresholds for health effects: a study of traffic wardens *Monika Watt, David Godden, John Cherrie, Anthony Seaton*

793 Occupational exposure to inhalable and total aerosol in the primary nickel production industry *P J Tsai, J H Vincent, G Wahl, G Maldonado*

800 Chronic effects of welding exposure on pulmonary function tests and respiratory symptoms *Özlem Özdemir, Numan Numanoğlu, Uğur Gönüllü, Ismail Savaş, Doğanay Alper, Hilmi Gürses*

804 Mortality in workers of copper cadmium alloy with special reference to lung cancer and non-malignant diseases of the respiratory system, 1946–92 *Tom Sorahan, Andrew Lister, Mark S Gilthorpe, J Malcolm Harrington*

813 A pilot study of the effect of low level exposure to mercury on the health of dental surgeons *Karen A Ritchie, Ewan B MacDonald, Richard Hammersley, Jacqueline M O'Neil, David A McGowan, Ian M Dale, Keith Wesnes*

818 Decreased glomerular filtration rate in solderers exposed to cadmium *Lars Järup, Bodil Persson, Carl Gustaf Elinder*

823 Occupational exposure to polychlorinated dibenzo-p-dioxins and dibenzofurans in a magnesium production plant *Marianne Hansson, Terje Grimstad, Christoffer Rappe*

827 Geltape method for measurement of work related surface contamination with cobalt containing dust: correlation between surface contamination and airborne exposure *Otto Melchior Poulsen, Erik Olsen, Jytte Molin Christensen, Peter Vinzent, Ole Holm Petersen*

834 Acute effects of vibration on digital circulatory function in healthy men *M Bovenzi, M J Griffin, C M Ruffell*

842 Some altered concentrations of elements in semen of workers exposed to trinitrotoluene *H X Liu, W H Qin, G R Wang, Z Z Yang, Y X Chang, Q G Jiang*

Correspondence

846 Dimercaptosuccinic acid (DMSA): negligible effect on manganese in urine and blood *Carol R Angle*

Notices

Book reviews

Indexes